INTERNATIONAL MARITIME ORGANIZATION

IMO

E

MARINE ENVIRONMENT PROTECTION COMMITTEE
43rd session
Agenda item 4

MEPC 43/4
5 January 1999
Original: ENGLISH

HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

Report of the Working Group on Ballast Water convened during MEPC 42

SUMMARY

Executive summary: This report contains the results of considerations of the Ballast Water Working Group meeting held during the 42nd session of the Committee. The Chairman presented an oral report to the Committee reflecting the status of current work, as set out in MEPC 42/22, paragraphs 8.1 to 8.29. The Committee requested the Secretariat to prepare an outline of the provisions that should be included for each of the three options of the legal framework. It further instructed the DE and SLF Sub-Committees to review the safety aspects of resolution A.868(20), comment on the safety issues of the draft regulations and code, and provide advice on the study submitted by IACS (MEPC 41/9/2).

Action to be taken: Paragraph 6

Related documents: MEPC 42/8, MEPC 42/WP.1/Rev.1, MEPC 42/22

1 Introduction

1.1 The Marine Environment Protection Committee at its forty-second session approved the report of its Ballast Water Working Group (MEPC 42/8), which had met in conjunction with MEPC 41. The MEPC Chairman pointed out that the ballast water management issue was probably the one with the highest priority on the Committee's agenda. The most significant issues to resolve were the application of the regulations prepared so far by the Working Group and the legal framework through which the regulations should be introduced as well as their entry-into-force provisions. The Chairman recalled that sufficient progress would need to be made by the end of this session in order to advise the IMO Council in May 1999 that financial provisions should be provided for the biennium 2000/2001 to convene a Diplomatic Conference with a view to adopting legally binding provisions on ballast water management.

1.2 Documents submitted for consideration at this session are listed as follows:

MEPC 42/8	Working Group	Report of the Working Group on Ballast Water convened during MEPC 41
MEPC 42/8/1	Secretariat	Legal framework options for international regulations on control and management of ships' ballast water

MEPC 42/8/2	Greece	Draft regulations and associated draft code with regard to ballast water management
MEPC 42/8/3	Brazil	Ballast water full scale trial on board M/V Lavras, a Brazilian product carrier, to evaluate the performance of the Dilution Method developed in Brazil
MEPC 42/8/4	Secretariat	Comments on Draft Regulations for the Control and Management of Ships' Ballast Water and Sediments to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens (MEPC 42/8, annex 1)
MEPC 42/8/5	Australia	Explanatory Memorandum on the Regulations and Code Proposed as an instrument for a ballast water Annex to MARPOL 73/78
MEPC 42/8/6	INTERTANKO	Standard reporting format of national requirements for ballast water management
MEPC 42/8/7	ICS	Control of a quarantine matter through anti-pollution measures
MEPC 42/8/8	INTERTANKO	Risk assessment approach
MEPC 42/8/9	United States	Comments on the Report of the Working Group on Ballast Water convened during MEPC 41 (MEPC 42/8)
MEPC 42/INF.14	Brazil	Ballast water full scale trial on board M/V Lavras, a Brazilian product carrier to evaluate the performance of the "Dilution Method" developed in Brazil - Technical Report
MEPC 42/INF.21	Secretariat	Steering Committee Meeting on Ballast Water Management: Cape Town, South Africa, 29-30 July 1998
MEPC 42/INF.27	Australia	International IMO Regulatory Framework for Ballast Water Management and Progress in the Australian Ballast Water Management and Research and Development Programs
MEPC 42/INF.33	ICS and INTERTANKO	Model for a ship's ballast water management plan to meet the requirements of Assembly resolution A.868(20)
MEPC 42/WP.1/Rev.1	Working Group	Compilation of proposed amendments and comments on Draft Regulations on Ballast Water Management (MEPC 42/8, annex 1)

1.3 The Committee reconvened the Working Group on Ballast Water and instructed it to review the draft regulations for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens (MEPC 42/WP.1/Rev.1), considering the following key issues (listed according to the priority assigned to each item):

.1 Legal framework / entry into force (for MEPC 43 consideration);

.2 Application;

.3 Coastal - port State definition
Responsibility for enforcement
Responsibility port State - flag State, other parties;

.4 Safety aspects;

.5 Regional agreements concept: Ballast Water areas / zones
Voyages other than deep sea voyages
Alternative treatment / technology - criteria;

.6 Standard settings: possible criteria
Ballast water Management Plan
Standard reporting format; and

.7 other issues:
Cost - benefit analysis, impact assessment
Risk assessment
Progressive implementation.

1.4 The Working Group met from 2 to 6 November 1998 under the chairmanship of Mr. D. Paterson (Australia). Experts from Australia; Brazil; Canada; China; Denmark; Egypt; Finland; France; Germany; Greece; Italy; Japan; Liberia; Malta; Marshall Islands; Netherlands; New Zealand; Norway; Panama; Poland; Republic of Korea; Russian Federation; Singapore; South Africa; Turkey; Ukraine; United Kingdom; United States; Hong Kong, China; ICS; IACS; IAPH; OCIMF; FOEI; IFSMA; INTERTANKO; ICCL; SIGTTO and WWF attended the meeting.

2 Consideration of documentation submitted on ballast water management to MEPC 42

The legal framework

2.1 The Working Group took note of three options for the purpose of establishing regulations for the management and control of ballast water (MEPC 42/8/1) as follows:

.1 amendments to an existing Annex to MARPOL 73/78;

.2 a Protocol to add a new Annex to MARPOL 73/78; and

.3 a new Convention

In light of the Plenary's decision to defer the legal framework issue to the next session of the Committee, the Working Group gave little further attention to this matter. The Secretariat was requested to prepare an outline of contents for each of the three options.

2.2 General approval met the suggestion of the United States that legal experts should be included in delegations to the next session. Delegations also undertook to review their position concerning the legal framework during the intersessional period, and to report back at MEPC 43.

Review of draft regulations

2.3 The Working Group Chairman recalled that the draft regulations and the code developed so far by the Working Group (MEPC 42/WP.1/Rev.1, annex 1) should be further revised and completed during this session for submission to the Plenary for consideration. Results of discussions on this matter are described in paragraphs 3.1 to 3.13 below.

Ballast Water Management Plan and Standard Reporting Format (MEPC 42/8/6; MEPC 42/8/8; MEPC 42/INF.33)

2.4 ICS and INTERTANKO presented a Model Ballast Water Management Plan[1] which is based upon the Ballast Water Management Guidelines adopted by IMO under Assembly resolution A.868(20). The Model Plan had been produced to assist shipowners and operators in developing an individual ballast water management plan for each ship in a consistent format. The booklet contains two parts: part A deals with ship and operating company guidance; and part B provides advice on national and international requirements. The Model Plan is structured as follows:

Section 1: Ship particulars. Information to identify the ship and overview of details requested by most quarantine authorities, as well as other relevant ship related information.

Section 2: Explanation of the need for ballast water management, and need for reporting to port States. Explains the necessity of the procedure and the required records.

Section 3: Ballast water arrangements on board. Summary of ship's ballast handling capability.

Section 4: Safety considerations. Specification of potential problems that may arise due to chosen ballast management option when ship is subject to certain circumstances.

Section 5: Procedures for managing ballast on board. Individual guidance on ballast handling procedures (step-by-step) which are suitable and known to be safe, including restrictions etc.

Section 6: Ballast water sampling points. Diagrams indicating sampling and access points, allowing crew members to assist port State officers in taking samples.

Section 7: Crew training and familiarization. Indication for crew members on where to find relevant material on ballast water treatment or exchange.

Section 8: Duties of appointed ballast water management officer. Duties depending on characteristics of ship, trade, crew etc.

Section 9: Ballast water reporting form and handling log. Example forms to serve as guide of information requested by quarantine officers.

Section 10: IMO Assembly Resolution A.868(20).

---

[1]The publication can be obtained from:

International Chamber of Shipping
12 Carthusian Street
London EC1M 6EZ
United Kingdom
Email: ics@marisec.org

The International Association of Independent Tanker Owners
Bogstadveien 27B
PO Box 5804 Majorstua
N-0308 Oslo
Norway
Email: postmaster@intertanko.com
Internet: http://www.intertanko.com

Section 11: Summaries of existing national or local quarantine requirements for ballast water management. Shows information and needs that will have to be regularly reviewed and updated.

2.5 The Working Group expressed its thanks to ICS and INTERTANKO for developing the model and recognized it as an useful instrument for generating individual Ballast Water Management Plans.

2.6 The Working Group agreed that a list of detailed guidelines related to the ballast water management plan should be developed and be included in the Appendix/Annex to the Code.

Ballast water treatment and dilution method

2.7 Brazil presented the results of a full-scale trial carried out on board M/V LAVRAS with its recently developed ballast water exchange method for oil carriers, the so-called dilution method (MEPC 42/8/3, MEPC 42/INF.14, Technical Report [2]). The results demonstrated that these tests were very successful: the exchange operation was safe and 90% of ballast water was changed; the analysis of samples confirmed that this method was effective in terms of aquatic species removal. The Working Group agreed to include the dilution method as an alternative method in the draft Code regarding ballast water management.

Consideration of other activities informally introduced at the meeting

Germany

2.8 A chemical treatment method was presented by Germany. A substance based on H_2O_2, together with specific "activators", is being developed and a series of biological tests have been carried out in Germany. Preliminary results revealed effectiveness of this substance applied on adults and larval stages of the brine shrimp *Artemia salina*. Further investigations on the effectiveness of this substance on phytoplankton and especially on the cysts, as well the efficiency in sediments are in preparation. All components are biodegradable / decomposable and with short half-life. The costs are comparable with those of ballast water exchange (approx. 150 US$ per 1000 t ballast water) and the substance can be added automatically to ballast water when taken on board. The Working Group welcomed this information and requested the submission of results of further investigations at future meetings.

Japan

2.9 Information regarding an electromechanical method for ballast water treatment was provided by Japan. In the experiment, using porous graphite electrodes acting as a filtration system, in which low electrical power was applied, marine organisms (planktonic larvae of benthos, zooplankton, phytoplankton, bacteria) and resting cysts of the dinoflagellate *Alexandrium* attached to the electrode surface and they were killed by the electrochemical treatment. The next step will be to apply this method to the high volumes of ballast water carried on a vessel.

2.10 The Working Group emphasized the necessity for developing alternative ballast water treatment methods. Alternative techniques should be as effective, safe, environmentally compatible and economical as ballast water exchange. Criteria to assess alternative options for ballast water exchange and criteria to evaluate their efficiency should be developed in the future.

[2] Ballast water full scale trial on board M/V Lavras, a Brazilian product carrier, to evaluate the performance of the "Dilution Method", developed in Brazil - Final Technical Report. Petrobras, October 1998.

Vessels unable to carry out ballast water exchange

2.11 SIGTTO distributed an information paper providing the summary of a brief survey concerning ballast water exchange of LPG (Liquid Petroleum Gas) and LNG (Liquid Natural Gas) vessels. Based on the responses to the questionnaire it revealed that the majority of vessels would be able to conduct ballast water exchange under the current configuration. However, the following aspects needed to be taken into consideration:

.1 lack of sufficient stability information available to determine if a ballast water exchange may be carried out safely;

.2 ballast water exchange can be carried out only under good weather conditions;

.3 problems with icing in areas in which LPG and LNG vessels are trading when considering the flow-through method;

.4 the significant number of ships which will incur delays due to ballast water exchange (probably this would increase because of the 200-mile requirement); and

.5 the introduction of onshore ballast facilities would require reconfiguration of the present piping and pumping system of several vessels.

Regional Agreements

2.12 The United Kingdom pointed out that the regulations should be sufficiently flexible to include provisions for co-operation with regional agreements and prepared a draft text on regional agreements (see annex 2). Assuming that the regulations in regional instruments would be similar to the draft regulations contained in MEPC 42/WP.1/Rev.1 and the draft Code contained in annex 2, Regulations 4.1(b), 4.4 and 7.2(c) would be of particular relevance.

2.13 The Secretariat suggested the text of Article 12 of the 1996 Protocol to the London Convention (see annex 3) as an example for co-operation between a global convention and regional treaties. This article encourages Contracting Parties with common interests in a given geographical area to enter into regional agreements, taking into account characteristic features of the regional marine environment. The contents of such agreements should be consistent with those of the Convention.

2.14 Members of the Working Group were invited to consider this matter during the intersessional period and to comment on it during the next meeting.

3 Review of Draft Regulations and Code

3.1 The Working Group reviewed the draft regulations and the Code[3] together with the explanatory memorandum prepared by Australia (MEPC 42/WP.1/Rev.1, MEPC 42/8/5). The draft Regulations and Code, as revised so far, are shown in annex 1.

3.2 **Application (Regulation 2).** As requested by the Committee, the Working Group gave intensive attention to the key issue regarding the application of the ballast water provisions and developed two

[3] The Secretariat had prepared a compilation incorporating comments received intersessionally on the Code. The Working Group, due to lack of time, did not consider the Code in detail and the compilation as prepared by the Secretariat is shown at annex 1

concepts of application (see annex 4) identifying ships to which the provisions should apply and those to which they might not apply.

3.3 Several relevant research results were taken into account by drafting the application concepts. The regulations should apply to all ships that carry ballast water independent of the amount of ballast water carried. Small ships should not be excluded because of their size, which would enable them to sail into a wider variety of ecosystems than larger vessels.

3.4 Some countries are characterized by coastlines bordering different oceans and thus different ecosystems. Considering that previously introduced foreign species may be distributed by national transportation modes (secondary introductions), it was recommended that the regulations should also apply to national shipping lines with a view to avoiding the translocation of species.

3.5 Under this item the Working Group also discussed in a general way exemptions for ships entitled to sovereign immunity, and agreed that this issue would be taken into account after the Committee's decision on a legal framework.

3.6 **Ballast Water Management Areas.** Norway, supported by several other delegations, proposed the development of a world map indicating adequate zones for ballast water exchange and areas which were incompatible for ballast water exchange. This would result in a network of Ballast Water Management Areas. The responsibility of coastal States in identifying such areas and, further, their right to enter into regional agreements involving neighbouring coastal States was recognized.

3.7 **Ballast Water Management Plan**. With regard to Regulation 7, the Working Group agreed to divide this into two regulations, thus keeping the Ballast Water Management Plan as a separate issue. Responsibilities and requirements of port States vs. Flag States concerning the implementation of the Ballast Water Management Plan need to be clarified. Controversial views were expressed concerning the question whether all ships should have onboard a Ballast Water Management Plan: i.e., on board every ship carrying ballast water and involved in international trade, or only on board those vessels which are operating in Ballast Water Management Areas.

3.8 **Risk Assessment.** Generally, for carrying out a risk assessment the origin of the ballast water, length of voyage and number of ship visits are the relevant factors but not the volume of the discharged ballast water. INTERTANKO emphasized the use of a risk assessment approach when developing ballast water management strategies to balance qualitatively and quantitatively the ecological and economical consequences of ballast water management. The principles of risk assessment in the regulations need to be developed and incorporated.

3.9 **New Regulations**. Two draft regulations, **Regulation 9** referring to **Port State Control and Operational Requirements** and **Regulation 10** referring to **Detection of Violations and Enforcement** had been prepared by the Secretariat. Comments and proposals made at the meeting will be taken into account in a revision by the Secretariat.

3.10 **Alternate areas for ballast water exchange** might result in new potential donor regions for non-indigenous species and thus provide a new pool for translocation of foreign organisms. Germany pointed out that in some regions this model is not applicable because potential sites were often situated near conservation areas (e.g. the Wadden Sea of the Southern North Sea).

3.11 **Precautionary Practices.** Practices that have been recommended to minimize the risk of uptaking harmful organisms were often not applicable because of natural constraints. Nevertheless, Australia recommended strongly to keep all precautionary practices set out in the Code, Part A, Section 2.

3.12 **Safety aspects**. The delegation of Greece, supported by other delegations, stated that the provisions on safety aspects should appear in more prominent positions in the regulations. A proposal on a Safety Regulation is attached (annex 5) and the Working Group was invited to discuss this issue during MEPC 43.

3.13 **Editorial comments.** Wording such as "where practicable", "wherever possible" should be avoided because these could be subject to interpretation and might therefore be difficult to implement in a uniform manner.

3.14 **Port State - coastal State - flag State**. The unclear and inaccurate terminology of "port State" and "coastal State" requires definition. The principles of responsibilities and application of port States, coastal States and flag States needs to be clarified. The Secretariat undertook to review this question in a revision of the draft regulations and the associated code.

3.15 The Working Group agreed that the draft Regulations and Code developed so far during previous sessions (annex 1), should be reviewed during the intersessional period.

4 Ballast Water Questionnaire

The Chairman of the Working Group drew attention to the importance of the responses to the questionnaire on ballast water management distributed under MEPC/Circ.342. So far the Secretariat has received 11 responses only. In addition, IAPH submitted approx. 50-60 responses on individual ports. Further responses should be received by the end of the year so that an evaluation may be presented to the next session of MEPC.

5 Work Programme of the Ballast Water Working Group

5.1 The Chairman drew attention to the fact that MEPC 42 had agreed that a Conference should be convened in 2000 for the consideration and adoption of legally binding provisions for ballast water management. Every effort should be made to fulfill such expectations. This means that at MEPC 43 in June/July 1999 the relevant drafts would have to be completed.

5.2 The Secretariat was requested to distribute the report of this meeting before the end of 1998, and to collect comments and distribute these by March 1999.

5.3 Finally the Chairman expressed his thanks to the members of the Working Group for their goodwill and co-operation; this enabled him to guide the group through many controversial issues.

6 Action requested by the Committee

The Committee is invited to approve the report of the Working Group on Ballast Water which reflects the results of its meeting held during MEPC 42.

***

ANNEX 1

PROPOSED AMENDMENTS AND COMMENTS ON THE DRAFT REGULATIONS AND CODE FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS TO MINIMIZE THE TRANSFER OF HARMFUL AQUATIC ORGANISMS AND PATHOGENS (in the form of an Annex to MARPOL 73/78)

Comments and proposed amendments submitted to MEPC 42 for consideration as set out in documents MEPC 42/8/2, MEPC 42/8/3, MEPC 42/8/4 and MEPC 42/8/9 have been reviewed by the Ballast Water Working Group. The results of this review, together with a compilation of the proposed amendments, are set out in this annex.

PROPOSED AMENDMENTS AND COMMENTS ON THE DRAFT REGULATIONS FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS TO MINIMIZE THE TRANSFER OF HARMFUL AQUATIC ORGANISMS AND PATHOGENS (in the form of an Annex to MARPOL 73/78)

Key: Italics = Text from IMO resolution
Underline or ~~strike~~ = Swedish proposal
comments in footnotes

General comments

United Kingdom
Many of the draft regulations are written in terms of '*Parties shall....*' even though the action is essentially for the ship. In keeping with Article 1 of MARPOL, and general practice in MARPOL Annexes, it is suggested that the wording be simplified to '*Ships shall....*' where applicable.

Brazil
Brazil invites the Ballast Water WG to consider the inclusion of the following suggestions in the draft:

- Adopt the risk assessment concept for the ballast water exchange operation. Neither of all ships, in all voyages, need to exchange ballast water; the draft should be revised accordingly to ensure the inclusion of this concept.
  When the ship is going to a voyage between two ports in which the eco-systems are similar/ compatible, then, we understand that the ballast water exchange operation is unnecessary and it should not be required. We consider necessary to specify this in the ballast regulations.

- The criteria for the adoption of the new Annex, when appropriate, should be the same used for Annex VI of MARPOL (on air pollution prevention) that is: 12 months after 15 States totalling 50% GRT of the world merchant fleet ratify the Annex;

Brazil invites the Ballast Water WG to consider the following general goals that should be achieved before the adoption of the new Annex Part B:

- The model for the Ship Ballast Water Management Plan needs to be drafted and proposed to IMO. This will be necessary to enable the evaluation of the whole operational and economic impact of a possible Annex VII of MARPOL to the shipping industry/activities.

- The absence of sufficient data related to environment indigenous species in the majority of the States is a barrier that should be considered. This barrier needs to be removed in order to enable adequate conditions to the Port States perform the ship's ballast water inspections and to apply risk assessment methodology for ship ballast water consideration (or acceptance) in port areas (in a global basis).

- It is suggested that the adoption of the new ballast requirements be implemented progressively (with a time schedule of measures/requirements which could be implemented in the next years), in order to avoid a reactive attitude/behaviour, to create difficulty for the entry into force of the Annex VII regulations and to avoid unilateral measures from the States.

- The safety aspects of the ship ballast water exchange at high seas needs to be better evaluated, as was defended by IACS in the last MEPC 41st session. Certainly, MSC should examine this question again (including also works for DE and SLF Sub-Committees). See also MSC/Circ.865 (dated 30 June 1998).

- The need to detail and to establish clear procedures, at the highest possible level, is of paramount importance, mainly in the Code. The Members of the Ballast Water Working Group should bear in mind this, in order to avoid misunderstandings and different interpretations by whom will be responsible for ships' inspection and ballast evaluation/acceptance (Port State Authorities/Officers).

- The sampling and analysis techniques, the ballast water acceptance standards (which need to be internationally agreed) and the shore institutional organization and infra-structure for the ballast water control are other relevant factors that need to be improved, in global terms, to enable the international ship ballast water management and control.

Conclusion

Based on the above considerations, Brazil understands that it is necessary more time to discuss and to elaborate the new Annex VII of MARPOL 73/78 on Ship Ballast Water. It would be, perhaps, premature to finish the technical discussion in the MEPC 42nd session without solving the several problems that still exist.

United States

Alternate compliance mechanism – Assuming the absence of a broad exemption to ballast water management, we believe the instrument must still provide a flexible framework for encouraging the development of new technologies. This goal could be reached through a provision that allows for the testing and application of new ballast water management methods that meet stated criteria or a standard. Such a provision should maximize compliance with the instrument, promote the development and implementation of effective management methods that address the problem of the translocation of marine organisms, and minimize the disruption to traditional vessel operations and schedules.

At this time, ballast water exchange is generally the only feasible ballast water management method available to ships. As the guidelines and draft instrument provide necessary exemptions for situations where exchange cannot be conducted safely, as well as require ballast water exchange only for deep sea voyages, it is understood that ships will not perform ballast water exchanges on 100% of their voyages. Therefore ballast water exchange must be viewed as only an interim solution to the problem of the spread of marine organisms. The new treaty must therefore encourage the development of new, safer and more effective ballast water management technologies.

The existing instrument provides for review and amendment to incorporate new and emerging ballast water treatment methods. Research and development programs testing a variety of ballast water treatment methods are underway and data is being quantified. However, the instrument does not contain a provision by which these methods could be field tested and evaluated relative to ballast water exchange.

Some of the most effective international environmental protocols are those that foster pollution prevention through incentive programs that encourage technological innovation. To encourage the development of new, safer and more effective ballast water management technologies, it is recommended that provision for the testing and application of new and developing ballast water management methods be incorporated into the instrument.

Regulation 1: Definitions	**Proposed amendments Regulation 1**
For the purpose of this Annex: "Area under its jurisdiction" means an area within which a State is entitled to exercise jurisdiction in accordance with international law. "Ballast Water" means water and suspended solids taken onboard a ship to control trim, draught, stability or stresses of a ship. "Ballast Water *Treatment" means a mechanical, physical, chemical or biological* process *to kill, remove or render infertile, harmful or potentially harmful organisms* and pathogens *within ballast water* and sediments. "Harmful Aquatic Organisms and Pathogens" means aquatic organisms and pathogens which, if introduced into the sea, estuaries or fresh water courses, may create hazards to human health, harm living resources and aquatic life, damage amenities, impair biological diversity or interfere with other legitimate uses of the sea. "Sediments" means solid matter settled out of ballast water within a ship. ["Deep Sea Voyage" means a voyage in which a ship navigates in waters 500 meters or more in depth and 200 nautical miles or more from the nearest land for periods of greater than 48 hours.] ["Voyage Other Than a Deep Sea Voyage"; definition may be required.]	**Australia** proposes to include in the definitions: **?**Voyage Other Than a Deep Sea Voyage" means a voyage in waters less than 200 nautical miles from shore and less than 500m in depth that is not in coastal waters. The square brackets would then be removed from **?**Deep Sea Voyage". [1] **Japan** proposes to replace the definition of "Deep Sea Voyage" by the following: "Deep Sea Voyage" means a voyage in which a ship navigates in waters 500 meters or more in depth, in open ocean and as far as possible from shore. [2] **Sweden** proposes to delete the definition of "Deep Sea Voyage" and replace it by the following: <u>"Open Ocean Voyage" means voyage in which Open Ocean Exchange should be conducted.</u> <u>"Open Ocean Exchange" means ballast water exchange in deep water, in open ocean and as far as possible from shore [, but not less than 200 nautical miles, and in water depths of 500 metres or more for periods of greater than 48 hours.].</u> [3]

[1] Deep Sea Voyage" has been defined as being a voyage which is undertaken for periods greater than 48 hours in waters of 500m in depth or more and 200 nautical miles from shore. This would be impractical for many countries, and voyages. In Australia's case most shipping coming to our ports from south eastern and south western Asia would not voyage in waters of sufficient depth for sufficient time to undertake one of the ballast water management options outlined in Appendix 1, Ballast Water Management Code, Part A, Section 1.

[2] Ships may not cross 200 nautical miles or more from shore for periods of greater than 48 hours, even during long voyages such as from Japan to Australia or to Singapore.

[3] We suggest a combination with the wording of the Guidelines (A.868(20), § 9.2.1) to include "as far as possible from shore". Such a change would require further changes of the following provisions; Regulations: 4.1(a) and 4.4; Annex I, Part A, Section 1:, A.1, A.3, A.4 and Section 3.A.

Regulation 2: Application Except where expressly provided otherwise, the provisions of this Annex shall apply to all ships that carry ballast water.	**No proposed amendments** **Australia** comments [4]

[4] Australia strongly supports this Regulation and would not like to see it compromised in any way. Unless these Regulations apply to all ships (of course with appropriate exemptions) little will be achieved through the new Annex that could not be otherwise achieved unilaterally by Port States. It is also consistent with the IMO's position as stated in Resolution A.868(20) and in relation to its precautionary approach agreed in Resolution MEPC.67(37) and obligations under the UNCED Agenda 21. Consistent with these obligations, Australia sees it as being obligatory on the IMO to apply the Annex to all ships unless otherwise exempted.

Regulation 3: General exceptions	**Proposed amendments Regulation 3.1**
Regulation 3.1 1 This Annex shall not apply to: (a) the discharge of ballast water and sediments necessary for the purpose of securing the safety of a ship or saving life at sea; or (b) the accidental discharge of ballast water and sediments resulting from damage to a ship or its equipment: i provided that all reasonable precautions have been taken before and after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and ii except if the owner or the Master acted either with intent to cause damage or recklessly and with knowledge that [environmental] damage would probably result; (c) the discharge of ballast water when being used for the purpose of combating specific pollution incidents in order to minimize the damage from pollution; and (d) the discharge of ballast water and sediments from ships [including fixed or floating platforms] at the same position where the ballast water and sediments had been taken onboard.	The **United Kingdom** suggests the following: 3.1(a) and (b) It should be sufficient to say '*ballast water*' without reference to sediments. **Japan** proposes to delete or set in square brackets the following: 3.1(c) "Any such discharge shall be subject to notification to any Party in whose jurisdiction it is contemplated the discharge will occur" [5] **Sweden** proposes to add the following text and set it in square brackets: 3.1[(d) the discharge of ballast water and sediments ~~[from ships] and~~ from offshore installations at a position where the whole of that ballast water and sediments had been loaded and provided that no mixing with ballast water and sediments from other areas has occurred.]

[5]This paragraph shall apply to the discharge of the ballast water for the purpose of trimming, heeling or lightening of the ship in order to reduce further pollutants spillage into the sea. In short, such discharge should be regarded as a contingency measure and not necessarily requires prior notification.

Regulation 3.2	**Proposed amendments Regulation 3.2**
2 Any port State [or port States] may exempt any ship or ships from compliance with all or part of these regulations in an area under its jurisdiction [provided this does not endanger marine ecosystems of neighbouring port States][provided this does not give favourable treatment conditions to those ships flying the flag of non-Parties to this Annex].	**Australia** suggests the following: 3.2 Any port State may exempt any ship or ships from compliance with all or part of these regulations in an area under its jurisdiction provided this does not endanger marine ecosystems of neighbouring port States provided this does not give favourable treatment conditions to those ships flying the flag of non-Parties to this Annex. The **United Kingdom** suggests the following: "*2 Any Party may exempt any ship in respect of requirements within its jurisdiction provided this does not endanger its marine ecosystem or that of other Parties.*" [6] "*A Party which allows such an exemption shall, as soon as possible, but not more than 90 days thereafter, communicate to the Organization and States having jurisdiction over adjacent waters, particulars of the exemption and the reasons therefore.*" [7]

[6]It is proposed that the term '*Port State*' be changed to 'Party' in all occurrences, so as to permit flag, coastal and port states to exempt ships from requirements within their jurisdiction. There was some discussion regarding commercial advantage gained by the Party granting the exemption, however the point of concern is not whether it gains commercial advantage but whether it endangers its own marine ecosystem or that of other Parties.

[7]The text makes an exemption conditional upon not endangering '*marine ecosystems of other Parties*'. The condition implies that an assessment of risk to other marine ecosystems must be conducted. Whilst well intentioned, it would be difficult to make such an assessment and to prove that it was correctly done. As a partial check, and to allow other Parties to contest an exemption, it is proposed that the Organization and States having jurisdiction over adjacent waters should be notified of all exemptions.

	Proposed amendments Regulation 3.2 (continued) The **United States** proposes to eliminate Regulation 3.2. [8]

[8]General Exceptions - Regulation 3(2) allows any port State the option of exempting ships from compliance with all or part of the regulations in areas under its jurisdiction. We are concerned about this exemption since it could result in a State joining the treaty, while exempting many of the treaty's regulations. This would result in extensive uncertainty and inconsistency regarding where and how the treaty applies, and undermines its effectiveness and most importantly its ability to achieve its intended objectives. The international community clearly realizes that the translocation of marine organisms in ballast water is a world problem and is attempting to address this problem through the development of an international instrument. If this instrument then allows such a broad exemption, it will undermine its objective of preventing or minimizing the continued spread of marine organisms and the resulting extraordinary environmental and related economic impacts. There are two fundamental reasons for this reality. First, invasions through ballast water cannot generally be predicted in advance. Some may argue that there are voyages that have a lower risk of causing invasions of exotic species because of:

1 Long-standing movement of ballast water from one State to another;
2 Absence of organisms-of-concern ("target organisms') in the ballast water; and
3 Distinctly different environmental conditions in the donor vs. receiver port.

The United States believes that this rationale does not offer adequate protection against new invasions to justify so broad an exemption for the following reasons:

1 Many invasions occur decades after ballast water movement was begun. For example the establishment of the European zebra mussel occurred in the Great Lakes of North America after decades of ballast water release from "zebra mussel home ports" in Europe.
2 Other than known pest species, it is generally impossible to predict which organisms in ballast water will become serious invaders once released into a non-native and novel environment because there are few characteristics that distinguish the organisms that will become noxious pests from other organisms. Preventing the movement of organisms from one country to another is the only effective strategy to prevent invasions.
3 The assumption that every organism in ballast water from a donor port with a distinctly different climate from the receiver port will necessarily die is questionable.

Second, even where invasions can be predicted, selective application of ballast water management measures will adversely effect efforts to prevent the international spread of marine organisms at the port State, regional and global levels. Ballast water management and exotic species invasions are not solely single port State-specific issues. A port State that unilaterally avails itself of the broad exemption could compromise the environment of neighboring States.

The United States however believes, that to preserve port State flexibility, as well as to focus on international movements of ballast water, the treaty should not apply to ships that operate solely within the jurisdiction of a single State (i.e. engage solely in domestic voyages). Similarly, the treaty's requirements with respect to voyages should apply only to international voyages.

	Proposed amendments Regulation 3.2 (continued) **Sweden** proposes the following: 2 (a) Any port State [or port States] may exempt any ship or ships from compliance with all or part of these regulations in an area under its jurisdiction ~~[~~ provided this does not: i. endanger ~~marine~~ aquatic ecosystems of neighbouring ~~port~~ States; ~~]~~ and/or ii increase the risk of transferring harmful aquatic organisms and pathogens through ships' ballast water and associated sediments; and/or iii. ~~[provided this does not~~ give favourable treatment conditions to those ships being exempted ~~flying the flag of non-Parties to this Annex~~]. (b) Particulars of any such exemption shall be explained, motivated and granted by the port State and indicated in the ships Ballast Water Management Plan. (c) The port State which allows any such exemption shall, as soon as possible, but not more than 90 days thereafter, communicate to the Organization particulars of the same and the reasons therefore, which the Organization shall circulate to the Parties of the Convention for their information and appropriate action, if any. [9]

[9] 3.2(a): i) the provision not endangering ecosystems of other States is in accordance e.g. with UNCLOS 1992, Part XII, Article 194(2) & (3) and should be retained. ii) UNCLOS furthermore specifically identifies the obligation "to take all measures necessary" to "prevent, reduce and control pollution of the marine environment resulting from [...] the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto." (Article 196). iii). Favourable treatment should not be given regardless of flag.

- 3.2(b) & (c): The kind of exemption provided for in 3.2(a) does not seem to have a precedent in other MARPOL Annexes, and as a minimum, there should be a reporting requirement on those port States granting such exemptions. The suggested additions are based on (but not identical to!) the language of MARPOL 73/78, Annex I, 2.4.b & c.

Regulation 4: Operational requirements **Regulation 4.1** 1 Except as provided in this Annex, ships shall (a) conduct on all [Deep Sea Voyages] at least one of the Ballast Management Options contained in Appendix 1, Part A, Section 1; and (b) conduct practices listed in Appendix 1, Part A, Section 2.	**Proposed amendments Regulation 3.2** (continued) **Greece** comments [10] **Proposed amendments Regulation 4.1** **Australia** proposes: removal of the square brackets from "Deep Sea Voyages" in 1(a): 1 Except as provided in this Annex, Parties shall require ships entitled to fly their flag or to operate under their authority to: and ships shall (a) conduct on all Deep Sea Voyages at least one of the Ballast Management Options contained in Appendix 1, Part A, Section 1; and The **United Kingdom** proposes: "*1 Except as provided elsewhere in this Annex, a ship which undertakes a [Deep Sea Voyage] shall conduct at least one of the Ballast Management Options contained in Appendix 1, Part A, Section 1.*" [11]

[10] 3.2 The draft text provides a port State with the option to grant exemptions to ships from the requirements of this annex. Since no criteria for exemptions are described, this provision entails the danger of exercising favourable treatment to selected ships, thus jeopardizing the marine environment. In addition, the implementation of the aforementioned procedure on a case-by-case basis, creates a considerable administrative burden.

[11] The practicability of the Precautionary Practices are dependent on circumstance and as such are not suitable for Flag State application. The Part A section 2 contains expressions such as "*every effort should be made*" and "*where practicable*". These cannot be checked and enforced by the Flag State, so it is proposed that this element be moved to Regulation 4(4) as a Port State requirement.
Regulation 4(1) should be re-written to acknowledge that some Ballast Management Options are conducted during '*deep sea voyages*' and some are conducted after '*deep sea voyages*'.

	Proposed amendments Regulation 4.1 (continued) **Hong Kong, China** comments [12] **Greece** proposes the following: "Except as provided in this annex, ships to which this Annex apply shall: (a) conduct on all [Deep Sea Voyages] at least one of the Ballast Management Options contained in Appendix 1, Part A, Section 1; and (b) conduct on all voyages Other Precautionary Practices listed in Appendix 1, Part A, Section 2." [13]

[12] 4.1(b) requires ships to conduct on all voyages precautionary practices and one practice is to remove ballast sediments on a timely basis. Where practicable, routine cleaning of the ballast tank to remove sediments should be carried out. Then it raises a question that how often should a ballast tank be cleaned up. Existing practice is to remove ballast tank sediments only for inspection or maintenance purpose. It is proposed that ballast tank sediments should be removed if considered necessary by the ship's master for the purpose to minimize the transfer of harmful aquatic organisms.

[13] Text can be simplified and made consistent with the other Annexes of MARPOL. In this regulation as well as in others, requirements are imposed to ships flying the flags of "Parties", putting such ships at a disadvantage *vis-a-vis* ships of "non-Parties". This policy has to change throughout the Annex because it will discourage acceptance.
Also the reference in subparagraph (a) to the "Options" contained in Section 1 of Part A is not realistic. Retention of ballast on board is a negative way of operating a ship since it reduces available cargo spaces and for that reason it should be regarded as a last resort option. As experience has shown, problems exist with regard to inadequacy or unavailability of port reception facilities. Thus, the regulation should be redrafted based on the IACS "conclusions" (MEPC 41/9/2) by taking particularly into account that some ships cannot safely perform the sequential method and some others cannot perform ballast water exchange by the flow-through method. In essence, this conclusion means that for most ships there is only one option. The regulation should also contain: a general reference to Part A (which will become mandatory), the commitment on reception/treatment facilities, the statement that the ships' safety is of paramount importance (as in resolution A.868(20)).

	Proposed amendments Regulation 4.1 (continued) **Sweden** proposes the following: 1 Except as provided in this Annex, Parties shall require ships entitled to fly their flag or to operate under their authority to: ~~[~~ and ships shall ~~]~~ (a) conduct on all ~~[Deep Sea Voyages]~~ Open Ocean Voyages at least one of the Ballast Management Options contained in Appendix 1, Part A, Section 1; and (b) conduct on all voyages Other Precautionary Practices listed in Appendix 1, Part A, Section 2; and (c) conduct on all voyages the ballast water management requirements of the destination port State (or a State in whose waters the ship intends to discharge ballast) provided that they are [consistent with this Annex] [according to the options contained in Part A, Section 3 of Appendix I]. [14] **United States** comments [15]

[14] The original text of 4.1(c), seems to have been accidentally deleted between versions 2 and 3 of the proposals discussed at MEPC 41. We propose rewording as above, and note that without a clause 4.1(c), there is no requirement on ships with respect to Appendix 1, Part A, Section 3 (regulation 4.4 only refers to requirements on port States).

[15] Precautionary practices – As noted above, ballast water exchange is not 100% effective and cannot be undertaken on all voyages, especially near coastal voyages. The draft instrument includes precautionary practices for ships to undertake to help mitigate the transfer of unwanted organisms and pathogens, whether or not ballast exchange is a possibility. However, the list of "Other Precautionary Practices" contained in Appendix 1, Part A, Section 2 and referenced in Regulation 4(1)(b) was drafted for the voluntary Assembly Resolution and should be updated and revised for use as part of a legally binding instrument.
To aid in the effective implementation of precautionary practices by ships, we suggest that:

1 Practices referenced in Regulation 4(1)(b) should be mandatory for ships, rather than linked in the regulation itself to "all voyages", as currently stated in the regulation. For example, the timely removal of ballast sediments should be mandatory for all ships.
2 The Working Group consider how to better address the problem of the international spread of reported outbreaks of serious harmful aquatic organisms or pathogens, including consideration of a prohibition on the discharge of untreated or unexchanged foreign ballast water originating from areas of reported outbreaks of harmful aquatic organisms or pathogens. (There is a proposed requirement on Port States to notify the Organization of such outbreaks in draft Regulation 7(4)).
3 Practices that are recommended and subject to the discretion of the ship's Master should be clearly designated as optional, but their practice encouraged.

Regulation 4.2	**Proposed amendments Regulation 4.2**
2 Parties shall periodically jointly review and amend Part A of Appendix 1 to incorporate *new and emerging ballast water treatments* which *may substitute for, or be used in conjunction with, current options*. Such options that may substitute for ballast water exchange shall be safe, environmentally sound and at least as effective as ballast water exchange in preventing or minimizing the transfer of harmful aquatic organisms, taking into account guidelines developed for this purpose by the Organization.	The **United Kingdom** proposes to add: "*The Administration may allow a ballast management option as an alternative to those required by this Annex if it is at least as effective as those required by this Annex.* *The Administration which allows a ballast management option as an alternative to those required by this Annex shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof, for their information and appropriate action if any.*" [16]
Regulation 4.3 3 Port States shall: (a) ensure that all ports having ship repair yards or tank cleaning facilities shall have adequate facilities available for the environmentally safe disposal of ballast tank sediments; (b) ensure that any port reception and/or treatment facilities for ballast water are adequate, effective, practical, safe and environmentally sound and that they operate without causing undue delay to vessels; and (c) undertake to communicate to the Organization a list of reception and treatment facilities including their location, capacity and available facilities and other characteristics.	**Proposed amendments Regulation 4.3** **Brazil** proposes: 3(a) to use the wording "endeavour to assure" instead of "ensure". [17]

[16] The form of such a joint review may depend upon the legal basis of the Regulations. If it is to be an Annex to MARPOL, then would the review be by Amendment of the Annex? If so, then it must conform with the procedures for amendment in Article 16. If it is to be outside the Amendment procedure then appropriate procedures must be developed. In order to permit new technology to be brought into use quickly, and to provide a basis for review and amendment of the Annex, it is proposed that an 'Equivalents' clause similar to Regulation 4 of Annex VI, be added.

[17] Shore reception facilities for ship ballast water and sediment disposal may not be ensured by the Port States in all situations.

Regulation 4.4	**Proposed amendments Regulation 4.4**
4 With respect to voyages other than [Deep Sea Voyages,] port States may, where practicable, apply approaches and considerations for ballast management and control as set out in Appendix 1, Part A, Section 3 and apply these requirements on ships with respect to such voyages consistent this Annex.	**Australia** proposes to remove the square brackets, so that it reads: "With respect to voyages other than Deep Sea Voyages, port States.....this Annex." The **United Kingdom** proposes the following text: *"4 Parties :-* *(a) shall require all ships which are within waters under their jurisdiction, to comply with the Precautionary Practices listed in Appendix 1, Part A, Section 2 to the extent which is deemed necessary and practicable; and* *(b) shall determine the extent to which ships which are within waters under their jurisdiction on voyages other than [Deep Sea Voyages], or ships on [Deep Sea Voyages] which are subject to Reg 4(5), shall practise ballast management. Where a Party establishes such requirements for ballast management, these shall be in accordance with the Options set out in Appendix 1, Part A, Section 3 and otherwise in terms which are consistent with this Annex."* [18] **Hong Kong, China** proposes: to delete "consistent this Annex". **Sweden** proposes the following: 4 With respect to voyages other than ~~[Deep Sea Voyages]~~ Open Ocean Voyages port States shall, where practicable, apply approaches and considerations for ballast management and control as set out in Appendix 1, Part A, Section 3 and apply these requirements on ships with respect to such voyages consistent with this Annex.

[18] As written, this regulation requires Port States to apply to all voyages other than [Deep Sea Voyages], one of the three ballast management options listed in Appendix 1, Part A, Section 3, i.e. exchange, non-release or discharge to reception facilities. It is inappropriate to apply such a universal requirement to all ships, especially those on short regional voyages. It is proposed that Parties should only apply requirements where appropriate to the circumstances and in a manner which is consistent with the framework of the Annex.
Also, the earlier proposal to make the Precautionary Practices a Port State requirement is included here, and a reference to Reg 4(5) is added to clarify the right of Port States to require alternative ballast management practises when a ship on a [Deep Sea Voyage] cannot meet Reg 4(1) for safety reasons (see Reg 4(5) below).

Regulation 4.5	**Proposed amendments Regulation 4.5**
5 Parties shall not apply any requirement on a ship relating to ballast water management options where the ship's ballast water management plan indicates it is unsafe or the master otherwise reasonably determines that undertaking such an operation would jeopardize the safety or stability of the ship, its crew, or its passengers. The master shall record any reason for not undertaking ballast water exchange in the ship's log.	The **United Kingdom** proposes: "*5 Parties shall waive any requirement under Reg 4(1) above, relating to ballast water management options, where the ship's ballast water management plan indicates it is unsafe or the Master otherwise reasonably determines that undertaking such an option would jeopardise the safety of the ship, its crew, or its passengers. The Master shall record any reason for not undertaking ballast water exchange in the ship's log. Port States may verify the Master's decision by examination of the ballast water management plan in conjunction with weather records, and may inform the Flag Administration of any disagreement.*" [19]

[19]Reg 4(5) requires Parties to '*waive any requirement*" whereas under Reg 7(3)(c) Port States shall inform ships of '*alternative action and appropriate control measures*'. There is a contradiction between the two in that 4(5) implies a waiver without qualification, whereas 7(3)(c) implies that Port States may impose alternative requirements.

This is an important issue because Port States which impose onerous alternatives to deep sea exchange will put ships under commercial pressure to exchange ballast when it may not be safe to do so. On the other hand a waiver without alternative requirement may be abused, and would limit the right of Parties to impose necessary controls in waters under their jurisdiction.

Furthermore, ships which encounter alternative requirements will be encouraged to make modifications or install equipment to enable them to comply with Reg 4(1) more frequently, and under poorer weather conditions. Port States which waive requirements to exchange ballast will encourage ships to defer modifications which would enhance their ability to exchange ballast or to treat ballast water.

A balance needs to be found, and it is suggested that in Reg 4(5), Parties are given powers to verify the Master's decision by analysis of the ballast water management plan and weather records, and may notify the Flag Administration of any disagreement.

It is also suggested that Parties shall only apply alternative requirements which have been established in accordance with the proposed Reg 4(4)(b), and so a reference to Reg 4(5) has been included in the proposal for Reg 4(4)(b) above.

Regulation 5: Training and Education 1 Parties shall endeavour to ensure that ships provide training for their officers and ratings engaged in ballast water management operations in the application of ballast water management and treatment procedures. Such training shall include, at a minimum, with respect to ballast water exchange at sea, the matters contained in Appendix 1, Part B, Section 1(a). Such training should also include instruction on the maintenance of appropriate records and logs. 2 Parties should ensure that their marine training organizations include the above *in the contents of their syllabus. Parties are encouraged to include knowledge of duties regarding the control of pollution of the sea by harmful aquatic organisms and pathogens.*	**Proposed amendments Regulation 5** The **United Kingdom** proposes to simplify the first sentence: "*Officers and ratings engaged in ballast water management operations shall be trained in the application of ballast water management and treatment procedures.*" [20] **Hong Kong, China** comments [21] **Greece** comments [22]
Regulation 6: Safety requirements Ships which conduct ballast water management or control options shall meet the operating safety requirements of Appendix 1, Part B.	**Proposed amendments Regulation 6** **Hong Kong, China** comments [23]

[20]With the exception of the first sentence of paragraph 1, this is too much detail for an Annex, and should be considered within STCW in keeping with the practice in other Annexes. The action should be restricted upon the ship.

[21]Regulation 5.1 requires ships to provide training for their officers and ratings. It is not clear which party of the ship should provide the training - ship's master, ship's chief engineer, ship's chief officer, ship's crew agency, ship's flag State, ship's owner, or the ship's manager, etc. It is the responsibility of the marine training organization to provide training and such training should be to the satisfaction of the certificate issuing authority before certificate is issued to the crew. Since training is fully covered in Reg.5.2 and STCW Convention, it is proposed to delete or amend Reg.5.1.

[22]The knowledge required for all certified deck officers could be established by STCW and delivered through the national curriculum. Ships would also provide "familiarization" to officers and ratings as necessary. This regulation - and the following as well - prescribe requirements, for ships "flying their flags" (see relevant remarks for regulation 4(1)).

[23]There is only one paragraph in Reg.6 and the paragraph number should be "1" instead of "3". The last word in this regulation should be "Section 1B" instead of "Section 1(b)".

Regulation 7: Information and Notification	**Proposed amendments Regulation 7.1**
Regulation 7.1 1 Ships carrying ballast water shall: (a) have on board a *ballast water management plan* approved by the administration to provide safe and effective procedures for ballast water management for the *minimization of transfer of harmful aquatic organisms and pathogens. The ballast water management plan* shall *i* *be specific to each ship;* ii detail safety procedures associated with any ballast management operations required by this Annex. These procedures include those contained in Appendix 1, Part B; iii be consistent with the model plan which appears in Appendix 3; and iv [24] 2 Parties shall require ships to: (a) inform the authorities of the port of destination *when specific ballast water procedures and/or treatment option(s)* required by this Annex *cannot be undertaken [due to* safety, adverse *weather*, vessel design, equipment failure, or any other extraordinary *conditions] as soon as possible and, where appropriate, prior to entering* a *sea* area *under its jurisdiction.* Provided that this requirement shall not apply unless the port State has notified the Organization of its desire to receive such information.	**Australia** proposes: the removal of the square brackets in the first sentence in 1, "and ships shall", and in 2(a) we suggest the second square bracketed text is included so that it reads: **?**(b) inform the authorities of the port of destination when specific ballast.....". 2(b) we strongly suggest that the square bracketed text remains so that it reads: **?**record and maintain aboard the ship for a minimum period of six months information on ballast water management.....". The **United Kingdom** proposes: to simplify the opening of the paragraph 1 to: "1 *Ships shall: .....*" **Sweden** proposes: to delete the square brackets in the first sentence in 1, "and ships shall". and 2(a) inform port state authorities under whose jurisdiction discharge of ballast water will take place ~~[inform the relevant port State authorities[[inform the authorities of the port of destination]~~ when specific ballast water procedures and/or treatment option(s) required by this Annex cannot be undertaken due to safety adverse weather, vessel design, equipment failure, or any other extraordinary conditions as soon as possible and, where appropriate, prior to entering a sea area under its jurisdiction. Provided that this requirement shall not apply unless the port State has notified the Organization of its desire to receive such information. **Hong Kong, China** proposes: 2(a) in the beginning of the last sentence the first two words, i.e. "Provided that", should be deleted for editorial improvement.

[24] to be included: text regarding distribution of Ballast Water Management Plan, etc. in relevant languages.

(b) record and maintain aboard the ship for a minimum period of six months] information on ballast water management actions and make that information readily available to port state authorities upon request. A suitable format with instructions is shown in Appendix 3. **Regulation 7.2** 2 Port States shall: (a) *make arrangements to ensure that ships may obtain the information regarding ballast water management requirements, procedures and facilities listed in Appendix 1, Part B, Sections 3 and 4;* [25] (b) assist ships in applying *the precautionary practices described* in Appendix 1, Part A, Section 2, *inform local agents and/or the ship* in a timely manner *of areas and situations where the loading of ballast water should be minimized,* including the situations listed in Part B, Section 4 of Appendix 1; and (c) inform ships of alternative action and appropriate control measures without undue delay in instances in which a ship reports that it cannot undertake any of the Ballast Management Options listed in Appendix 1, Part A. (d) notify the Organization for dissemination to the Member States whether it wants ships to inform it, pursuant to Regulation 7(1)(b).	

[25] Normally such information is available to shipping agents and ships would obtain the information from them. In the absence of an Agent then information would be obtained from the Port Authority when the ship makes arrangements for its arrival. It is neither necessary nor practicable to add a third tier of communications to provide ships with this information, and quite impossible to do so without initial contact from the ship.

Regulation 7.3 3 Parties shall notify the Organization in a timely manner for dissemination to all Member States any information regarding: (a) significant occurrences of harmful aquatic organisms and pathogens (e.g. toxic algal blooms) in the area under its jurisdiction, likely to be of relevance to ballast water loading and/or its discharge; (b) [the location and capacities of any facilities for the reception, treatment or safe disposal of ballast water and/or sediments, as appropriate;][26] and *(c)* *[*without prejudice to confidential information *]any research results concerning the application and effectiveness of new* or equivalent *ballast water management*, sampling and analysis *technologies* or *control equipment with a view to evaluation and incorporation, as appropriate, into Appendix 1, Part A.*	
Regulation 7.4 4 [Parties shall provide the Organization with details of their requirements in implementing this Annex for circulation to the Parties to this Annex for their information and appropriate action.][26]	

[26]possibly covered by Article 11.

Regulation 8: Role of National Authorities	**Proposed amendments Regulation 8**
Parties shall [endeavour to] implement the requirements of this Annex in a consistent manner within the area under their jurisdiction and with minimum risks and associated costs to the environment and at a minimum cost and without causing undue delay to ships.	**Australia** proposes to delete the text in the square brackets, so that it reads: " Parties shall endeavour to implement the requirements of .....to ships" **Sweden** proposes: Parties shall ŧendeavour toŧ implement the requirements of this Annex in a uniform manner within the area under their jurisdiction and with minimum risks and associated costs to the environment and at a minimum cost and without causing undue delay to ships.

Regulation 9: Port State Control: Enforcement **Regulation 9.1** 1 A ship, when in a port or an offshore terminal under the jurisdiction of another Party to this Annex, is subject to inspection by officers duly authorized by such Party to ensure that the operational requirements under this Annex have been met. **Regulation 9.2** 2 Where there are clear grounds for believing that these requirements have not been met, the Party may take any further reasonable action it considers necessary. **Regulation 9.3** .3 Procedures relating to the port State control prescribed in article 5 of the present Convention shall apply to this regulation. **Regulation 9.4** 4 Nothing in this regulation shall be construed to limit the rights and obligations of a Party carrying out control over operational requirements specifically provided for in the present Convention or existing rights and obligations of Parties under international law.	

Regulation 10: Detection of Violations and Enforcement **Regulation 10.1** 1 Parties to this Annex shall co-operate in the detection of violations and the enforcement of the provisions of this Annex, using all appropriate and practicable measures of detection and environmental monitoring, adequate procedures for reporting and accumulation of evidence. **Regulation 10.2** 2 A ship to which the present Annex applies may, in any port or offshore terminal of a Party, be subject to inspection by officers appointed or authorized by that Party for the purpose of verifying whether the ship has violated any of the provisions of this Annex. If an inspection indicates a violation of this Annex, a report shall be forwarded to the Administration for any appropriate action. **Regulation 10.3** 3 Any Party shall furnish to the Administration evidence, if any, that the ship has violated any of the provisions of this Annex. If it is practicable to do so, the competent authority of the former Party shall notify the master of the ship of the alleged violation. **Regulation 10.4** 4 Upon receiving such evidence, the Administration so informed shall investigate the matter, and may request the other Party to furnish further or better evidence of the alleged contravention. If the Administration is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken in accordance with its law as soon as possible. The Administration shall promptly inform the Party which has reported the alleged violation, as well as the Organization, of the action taken.	

Regulation 10.5 5 A Party may also inspect a ship to which this Annex applies when it enters the ports or offshore terminals under its jurisdiction, if a request for an investigation is received from any Party together with sufficient evidence that the ship has not fully complied with this Annex. The report of such investigation shall be sent to the Party requesting it and to the Administration so that the appropriate action may be taken under the present Convention. **Regulation 10.6** 6 Nothing in this Annex shall be interpreted to limit the existing rights and obligations of a Party under international law concerning the prevention, reduction, and control of pollution of the marine environment from ships, including that law relating to enforcement and safeguards, in force at the time of application or interpretation of this Annex.	

PROPOSED AMENDMENTS AND COMMENTS ON THE BALLAST WATER MANAGEMENT CODE

Part A - Ballast Management Practices Section 1 - Ballast Management Options for Deep Sea Voyages A. Ballast water exchange 1. Introduction: *Near-coastal (including port and estuarine) organisms released in the [deep sea,] and oceanic organisms released in coastal waters, do not generally survive.* Ballast water exchange ~~in the~~ at deep sea, such as through sequentially emptying and refilling the ballasted tanks or causing water to flow-through ballasted tanks, can therefore reduce the probability of transfers of harmful aquatic organisms and pathogens. 2. Safety: *When exchanging ballast at sea, guidance on safety aspects of ballast water exchange as set out* in part B of ~~the~~ this Appendix *shall be [taken into account][*followed]. When exchanging ballast water at sea, the ship's safety shall be of paramount importance and the appropriate conditions set out in ..... shall be strictly observed. 3. [Location: Ships shall conduct ballast water exchange in water 500 meters or more in depth and 200 nautical miles or more from shore.] 4. Techniques: When conducting ballast water exchange, one of the following techniques shall be employed: - *The sequential method. Where this method is employed, all of the ballast water should be discharged until suction is lost, and stripping pumps or eductors should be used if possible; and* - *The flow-through method. Where this method is employed in the deep sea by pumping ballast water into the tank or hold and allowing the water to overflow, at least three times the tank volume should be pumped through the tank.*	**Proposed amendments Part A, Section 1.A** **Sweden** proposes the following: Section 1 - Ballast Management Options for ~~Deep Sea Voyages~~ Open Ocean Voyages A. 1. Introduction: *Near-coastal (including port and estuarine) organisms released in the ~~[deep sea,]~~ open ocean and oceanic organisms released in coastal waters, do not generally survive.* Ballast water exchange ~~in the~~ at ~~*[deep sea,]*~~ *open ocean*, such as through sequentially emptying and refilling the ballasted tanks or causing water to flow-through ballasted tanks, can therefore reduce the probability of transfers of harmful aquatic organisms and pathogens. 2. Safety: *When exchanging ballast at sea, guidance on safety aspects of ballast water exchange as set out* in part B of ~~the~~ this Appendix *shall be [taken into account][*followed]. When exchanging ballast water at sea, the ship's safety shall be of paramount importance and the appropriate conditions set out in ..... shall be strictly observed. 3. ~~[Location: Ships shall conduct ballast water exchange in water 500 meters or more in depth and 200 nautical miles or more from shore.]~~ Location: ships shall conduct ballast water exchange in deep water, in open ocean and as far as possible from shore, [but not less than 200 nautical miles] [, and in water depths of 500 metres or more]. 4. - *The flow-through method. Where this method is employed in the ~~[deep sea,]~~ open ocean by pumping ballast water into the tank or hold and allowing the water to overflow, at least three times the tank volume should be pumped through the tank.*

	Proposed amendments Part A, Section 1.A (continued) **Hong Kong, China** proposes: The heading of Section 1.A is amended as follows: "A. Ballast water exchange [for ballast which is intended to be discharged in the next port]". [27]
Part A, Section 1.B *B. Non-release of ballast water* *Ballast water may be retained* on board.	**Proposed amendments Part A, Section 1.B** **Hong Kong, China** proposes: The heading of Section 1.B is amended as follows: "B. Non release of ballast water [when the ship is inside port area] [when the ship is inside area under a port State's jurisdiction]".
Part A, Section 1.C *C. Discharge to reception facilities* *If reception facilities for ballast water and/or sediments are provided by a port State* in accordance with regulation 4(3), they shall, *where appropriate, by utilized.*	**Proposed amendments Part A, Section 1.C** **Australia** proposes the following: This Section should be consistent with Section 3.A, and clause C should include the word **?**may" instead of **?**shall". [28]

[27]It is considered that permanent ballast or ballast water which is intended for more than one voyage is not required to be exchanged before the next port.

[28]In other respects Section 1.C should also be the same as Section 3.C.

Part A, Section 1.D	**Proposed amendments Part A, Section 1.D**
D. Other ballast water treatment options as approved under regulation 4(2). If a ship cannot conduct any of the ballast water management options set forth above due to conditions set forth in Regulation 4(4), the ship shall *only discharge the minimum essential amount of ballast water in accordance with port States' contingency strategies* and requirements. In instances in which a destination port State has not provided such contingency strategies and requirements pursuant to Regulation 7(3)(a) or has not notified the Organization pursuant to Regulations 7(1)(b) and 7(3)(d), the ship's master shall determine the minimum essential amount to be discharged. ***[REVIEWED BY WORKING GROUP TO THIS POINT]*** ----------	**Australia** proposes the following: In the paragraph (not numbered) following Section 1.D, which commences **?**If a ship cannot conduct any of the ballast water management options set forth above due to conditions set forth in Regulation 4(4)", reference to Regulation 4(4) should be removed as it could indicate that exchange cannot be undertaken under 4(4) and is therefore confusing. The words **?**due to any exceptions set forth in this Annex" would be more suitable.[29] **Hong Kong, China** proposes: Last paragraph of Part A, Section 1 is amended as follows for editorial improvement: "If a ship cannot ..... set forth in Reg.~~4(4)~~[4.5], the ship shall only discharge the minimum .....". **Brazil** comments [30]

[29]Australia would find it difficult to support the Annex with reference to 4(4) remaining in this paragraph.

[30]Brazil invites the WG to consider the following suggestion: The inclusion in the Part A of Appendix 1 of Dilution Method for oil carriers ballast water exchange at deep sea as a recognized treatment method.

The text below is part of a proposal submitted to the Working Group at MEPC 41 ***Part A, Section 2 - Other Precautionary Practices*** *A. Minimizing uptake of harmful aquatic organisms, pathogens and sediments* *When loading ballast, every effort should be made to avoid the uptake of potentially harmful aquatic organisms, pathogens and sediments that may contain such organisms. The uptake of ballast water should be minimized or, where practicable, avoided in areas and situations such as:* - *in darkness when bottom-dwelling organisms may rise up in the water column;* - *in very shallow water;* - *where propellers may stir up sediment; or,* - *other areas identified by the port State in connection with advice.*	**No proposed amendments**
Part A, Section 2.B *B. Removing ballast sediments on a timely basis* *Where practicable, routine cleaning of the ballast tank to remove sediments shall be carried out in the deep sea or under controlled arrangements in port or dry dock, in accordance with the provisions of the ship's ballast water management plan.*	**Proposed amendments Part A, Section 2.B** **Australia** proposes: B. Removing ballast sediments on a timely basis, add the following text to the end: **?**in accordance with a port States requirements where this occurs in a port". [31] **Sweden** proposes the following: *B. Removing ballast sediments on a timely basis* *Where practicable, routine cleaning of the ballast tank to remove sediments shall be carried out in the ~~[deep sea,]~~ open ocean or under controlled arrangements in port or dry dock, in accordance with the provisions of the ship's ballast water management plan.*

[31]There may be mandatory requirements in a number of countries, as there is in Australia, for the safe on-land disposal of sediment specifically taken out of a ballast tank, for instance, by shovelling out.

Part A, Section 2.C	**Proposed amendments Part A, Section 2.C**
C. Avoiding unnecessary discharge of ballast water *If it is necessary to take on and discharge ballast water in the same port to facilitate safe cargo operations, unnecessary discharge of ballast water that has been loaded in another port* **shall** *be avoided.*	**Hong Kong, China** proposes: The heading of Part A, Section 2C is amended as follows for editorial improvement: "C. Avoiding unnecessary discharge of ballast water [in port areas]".

Part A, Section 3 - Ballast Water Exchange in Designated Alternate Areas	**Proposed amendments Part A, Section 3.A**
A. Ballast Water Exchange **1 Alternate areas where designated should be based on scientific information. States, in designating such areas, shall take into account environmental effects on other States, with a view to avoiding the creation of hazards for other States.** **2 Safety:** *When exchanging ballast at sea, guidance on safety aspects of ballast water exchange as set out* **in part B of the Appendix** *shall be taken into account.* **3 Techniques: When conducting ballast water exchange, one of the following techniques shall be employed:** - *The sequential method. Where this method is employed, all of the ballast water should be discharged until suction is lost, and stripping pumps or eductors should be used if possible;* - *The flow-through method. Where this method is employed in the deep sea by pumping ballast water into the tank or hold and allowing the water to overflow, at least three times the tank volume should be pumped through the tank; and* - *Other ballast exchange options approved by the port State.*	**Australia** proposes: The heading (Part A, Section 3) should be changed to: "Ballast Water Exchange in Designated Areas and on Voyages Other Than Deep Sea Voyages." [32] The text **?**based on scientific information" in Section 3, A.1 must be changed to **?**based on scientific information where practicable" [33] **Sweden** proposes the following: **Section 3 - Ballast Water <u>Management Options</u> ~~Exchange in Designated Alternate Areas~~ <u>for voyages other than open ocean voyages</u>** [34] <u>When open ocean exchange of ballast water cannot be undertaken, requirements by individual port States or requirements developed within regional agreements may be in operation, and shall be observed, provided that they are consistent with this Annex</u> [35] **A. Ballast Water Exchange in <u>Designated Alternate Areas</u>** **3** ~~*Other ballast exchange options approved by the port State*~~ [3636]

[32]This is consistent with Regulation 4(4) and makes its broad intention clear in the Code.

[33]Otherwise Australia would be unable to support this clause in the Code or the definition of **?**Deep Sea Voyage" in the Regulations. Many countries, including Australia, will be faced with the need to require a mid ocean exchange during voyages other than Deep Sea Voyages, and this Section must therefore be practical in its application. Scientific information is unlikely to be available for many years for mid ocean areas less than 200 nautical miles offshore and/or shallower than 500m in depth. By including this requirement these countries would effectively be prevented from requiring ballast water exchange during voyages other than those undertaken in deep ocean as defined in these Regulations.

[34]Exchange in "Designated Alternate Areas" is a subsection of Section 3.

[35]suggested new introductory text.

[36]Move to the end of Section 3 as 3(D)

	Proposed amendments Part A, Section 3.A (continued) **Hong Kong, China** proposes: The second paragraph of Part A, Section 3A.3 is amended as follows: "- The flow-through method. Where this method is employed, ~~in the deep sea by pumping~~ ballast water [is pumped] into the tank or hold and allowing the water .....". [37]
Part A, Section 3.B *B Non-release release of ballast water* *Ballast water may be retained in tanks or holds.*	**Proposed amendments Part A, Section 3.B** **Hong Kong, China** proposes: The heading of Part A, Section 3B is amended as: "B Non-releases ~~release~~ of ballast water"

[37]The amendment is due to this Section 3 referring to non-deep sea voyage only under Reg. 4.4.

Part A, Section 3.C	**Proposed amendments Part A, Section 3.C**
C Discharge to reception facilities *If reception facilities for ballast water and/or sediments are provided by a port State*, they **may**, *where appropriate, utilized.* **If a ship cannot conduct one of the ballast water management options set forth above due to conditions set forth in Regulation 4(4) and a lack of reception facilities, the ship shall** *only discharge the minimum essential amount of ballast water* **to the extent permitted and** *in accordance with port State's contingency strategies* **and requirements**.	**Hong Kong, China** proposes: Part A, Section 3C is amended as follows: "C Discharge to reception facilities If reception facilities for ballast water and/or ....., where appropriate, be utilized. If a ship cannot conduct one of the ballast water management options ..... in Regulation ~~r(4)~~ [4.5] and a lack of reception facilities, the .....". **Australia** proposes the following: This Section should also be consistent with Section 1.A, and include the following: D. Other ballast water treatment options as approved under Regulation 4(2) comments [38] **Sweden** proposes the following: *C Discharge to reception facilities* *If reception facilities for ballast water and/or sediments are provided by a port State*, they ~~**may**~~ <u>shall</u>, *where appropriate, be utilized*.

[38] The paragraph (not numbered) at the end of Section 3 should again not include reference specifically to Section 4(4), as Australia could not support it with this reference remaining as outlined above in relation to Section 1.A. The words **?**due to any exceptions set forth in this Annex**?** are suggested to replace reference to Regulation 4(4). In addition, it is important that consistency between the final paragraph in Section 1.A and Section 3.A is maintained, and it is suggested that the words **?**and a lack of reception facilities" be deleted, as this is understood, and not needed if reference to Regulation 4(4) is deleted.

	D Other ballast exchange options approved by the port State. [39] E Other ballast water treatment options as approved under regulation 4(2). [40]
Part B - Ballast Management Plans and Information **Section 1 - Operational Safety Requirements** **A. Training Information with Respect to Ballast Water Exchange at Sea:** *.1 the ship's pumping plan, which should show ballast pumping arrangements, with positions of associated air and sounding pipes, positions of all compartment and tank suctions and pipelines connecting them to ship's ballast pumps and, in the case of use of the flow through method of ballast water exchange, the openings used for release of water from the top of the tank together with overboard discharge arrangements;* *.2 the method of ensuring that sounding pipes are clear, and that air pipes and their non-return devices are in good order;* *.3 the different times required to undertake the various ballast water exchange operations;* *.4 the methods in use for ballast water exchange at sea if applicable with particular reference to required safety precautions; and* *.5 the method of on-board ballast water record keeping, reporting and recording of routine soundings.*	**No proposed amendments**

[39]Moved from Section 3.A(3)

[40]Same text as for Section 1.

Part B, Section 1.B **B. Parties shall endeavour to ensure that ships flying their flag or operating under their authority which may conduct ballast water exchange:** *.1 are fitted as needed, with a loading instrument to perform calculations of shear forces and bending moments induced by ballast water exchange at sea and to compare with the permissible strength limits;* *.2* **undertake** *(a)n evaluation of the safety margins for stability and strength contained in allowable seagoing conditions specified in the approved trim and stability booklet and the loading manual, relevant to individual types of ships and loading conditions. In this regard particular account should be taken of the following requirements:* *.1 stability to be maintained at all times to values not less than those recommended by the Organization (or required by the Administration);* *.2 longitudinal stress values not to exceed those permitted by the ship's classification society with regard to prevailing sea conditions; and* *.3 exchange of ballast in tanks or holds where significant structural loads may be generated by sloshing action in the partially filled tank or hold to be carried out in favourable sea and swell conditions so that the risk of structural damage is minimized.*	**No proposed amendments**

Part B, Section 2.A *A. Ships engaged in ballast water exchange at sea* **shall have** *procedures* **for ballast management operations** *which account for the following* **safety considerations**, *as applicable:* *.1 avoidance of over and under-pressurization of ballast tanks;* *.2 free surface effects on stability and sloshing loads in tanks that may be slack at any one time;* *.3 admissible weather conditions;* *.4 weather routing in areas seasonably affected by cyclones, typhoons, hurricanes, or heavy icing conditions;* *.5 maintenance of adequate intact stability in accordance with an approved trim and stability booklet;* *.6 permissible seagoing strength limits of shear forces and bending moments in accordance with an approved loading manual;* *.7 torsional forces, where relevant;* *.8 minimum/maximum forward and aft draughts;* *.9 wave -induced hull vibration;* *.10 documented records of ballasting and/or de-ballasting;* *.11 contingency procedures for situations which may affect the ballast water exchange at sea, including deteriorating weather conditions, pump failure, loss of power, etc.;* *.12 time to complete the ballast water exchange or an appropriate sequence thereof, taking into account that the ballast water may represent 50% of the total cargo capacity for some ships; and* *.13 monitoring and controlling the amount of ballast water.*	**No proposed amendments**

Part B, Section 2.B *B. If the flow through method is used, caution should be exercised, since:* *.1 air pipes are not designed for continuous ballast water overflow;* *.2 current research indicates that pumping of at least three full volumes of the tank capacity could be needed to be effective when filling clean water from the bottom and overflowing from the top; and* *.3 certain watertight and weathertight closures (e.g. manholes) which may be opened during ballast exchange, should be re-secured.*	**No proposed amendments**
Part B, Section 2.C *C. The ballast water management plan* **shall** *include a list of circumstances in which ballast water exchange should not be undertaken. These circumstances may result from critical situations of an exceptional nature, force majeure due to stress of weather, or any other circumstances in which human life or safety of the ship is threatened.*	**No proposed amendments**

Part B, Section 2.D *D. The ballast water management plan* **shall** *include:* - *the nomination of key shipboard control personnel undertaking ballast water exchange at sea;* - *relevant parts of this Annex;* - *approval documentation relevant to treatment equipment;* - *an indication or records required; and* - *the location of possible sampling points.*	**Proposed amendments Part B, Section 2.D** **Sweden** proposes: *D The ballast water management plan* **shall** *include:* - *the nomination of key shipboard control personnel undertaking ballast water exchange at sea;* - *relevant parts of this Annex;* - *approval documentation relevant to treatment equipment;* - approval of the ship's Ballast Water Management Plan and any revisions thereto, pursuant to regulation 7.2 - <u>particulars of any exemptions granted pursuant to regulation 3.2</u> - *an indication or records required; and* - *the location of possible sampling points.*
Part B, Section 3 - Information to be Provided to Ships by Port State Authorities - *details of their requirements concerning ballast water management;* - *location and terms of use of alternative exchange zones;* - *any other port contingency arrangements; and* - *the availability, location, capacities of and applicable fees relevant to reception facilities that are being provided for the environmentally safe disposal of ballast water and associated sediment.*	**Proposed amendments Part B, Section 3** **Australia** suggests to unbolding the headings of Sections 3 and 4 in the interests of consistency throughout the document.

Part B, Section 4 - Port State Information to be Provided to Ships Upon Request	**Proposed amendments Part B, Section 4**
- *areas with outbreaks, infestations or know populations of harmful organisms and pathogens;* - *areas with current phytoplankton blooms (algal blooms, such as red tides);* - *nearby sewage outfalls;* - *when a tidal stream is know to be the more turbid; and* - *areas where tidal flushing is known to be poor.*	**Sweden** proposes the following: **Section 4 - Port State Information to be Provided to Ships Upon Request** - *areas with outbreaks, infestations or know populations of harmful <u>aquatic</u> organisms and pathogens;* - *areas with ~~current phytoplankton blooms (algal blooms, such as red tides)~~;*<u>significant occurrences of harmful aquatic organisms and pathogens (e.g. toxic algal blooms) in the area under its jurisdiction, likely to be of relevance to ballast water loading and/or its discharge;</u>[41] - *nearby sewage outfalls;* - *when a tidal stream is know to be the more turbid; and* - *areas where tidal flushing is known to be poor.*

[41] text moved from 7.4(a)

Part C - Recommendation to Assist to this Annex *Section 1 - Dissemination of Information* *A. Parties are encouraged to maintain and exchange information relevant to this Annex through the Organization. Accordingly, Parties are encouraged to provide the Organization with the following:* *.1 Information on severe outbreaks or infestations of harmful aquatic organisms which may pose a risk;* *.2 Copies of current domestic laws and regulations* *.3 Technical and research information;* *.4 Education material (such as audio and video tapes) and printed materials; and* *.5 Location and terms of use of alternative exchange zones, contingency strategies, availability of shore reception facilities, fees, etc.*	**Proposed amendments Part C, Section 1.A** **Sweden** proposes: *A.* *.4 Education material (such as audio and video tapes) and printed materials~~; and~~* *.5 Location and terms of use of alternative exchange zones, contingency strategies, availability of shore reception facilities, fees, etc.; and* **.6 Information on new methods for sampling and analysis**. [42]
Part C, Section 1.B *B. Parties applying ballast water and sediment discharge procedures, should notify the Organization of specific requirements and provide to the Organization for the information of other Member States and non-governmental organizations, copies of any regulation, standards, exemptions or guidelines being applied. Verification and detailed information concerning port state requirements should be obtained by the ship prior to arrival.*	**No proposed amendments**

[42] cf. suggested amendments to section 9.~~12~~.9

Part C, Section 1.C *C. Parties should provide to the Organization details of any research and development studies that they carry out with respect to the impact and control of harmful aquatic organisms and pathogens in ships ballast water and sediments.*	**No proposed amendments**
Part C, Section 1.D *D. Parties should provide to the Organization details of records describing reasons why existing requirements could not be complied with, e.g., force majeure, heavy weather, failure of equipment, for lack of information concerning port State requirements.*	**No proposed amendments**

***

ANNEX 2

REGIONAL AGREEMENTS

1 Two or more Parties may conclude regional agreements which specify the extent to which ships shall comply with the requirements of these regulations [this Annex], when voyaging to or when they are within waters under the jurisdiction of any of the Parties to the regional agreement.

2 A regional agreement shall not apply requirements which are in excess of the requirements of these regulations [this Annex].

3 Parties proposing a regional agreement shall notify the Secretary-General of the International Maritime Organization of their intention to negotiate an agreement and shall make appropriate arrangements for other interested Parties to be involved in the negotiations. When notifying the Secretary-General of their intention to negotiate a regional agreement, and on the concluding of an agreement, the Parties involved shall communicate to the Secretary-General all relevant particulars relating to it for circulation to all Parties. An agreement shall not enter into force until 12 months after its conclusion has been notified to the Secretary-General.

(Note - to some extent, the proposed text assumes that the regulations will be broadly similar to the draft regulations contained in MEPC 42/WP.1/Rev.1 and the draft Code contained in MEPC 42/WP.1. Regulations 4.1(b), 4.4 and 7.2(c) are of particular relevance.)

***

ANNEX 3

REGIONAL CO-OPERATION

(Article 12 of the 1996 Protocol to the
Convention on the Prevention of Marine Pollution
by Dumping of Wastes and Other Matter, 1972)

ARTICLE 12

REGIONAL CO-OPERATION

In order to further the objectives of this Protocol, Contracting Parties with common interests to protect the marine environment in a given geographical area shall endeavour, taking into account characteristic regional features, to enhance regional co-operation including the conclusion of regional agreements consistent with this Protocol for the prevention, reduction and where practicable elimination of pollution caused by dumping or incineration at sea of wastes or other matter. Contracting Parties shall seek to co-operate with the parties to regional agreements in order to develop harmonized procedures to be followed by Contracting Parties to the different conventions concerned.

***

ANNEX 4

APPLICATION CONCEPTS

APPLICATION CONCEPT 1

Unless expressly provided otherwise, the Regulations of this [Annex/Convention] apply to all ships* that carry ballast water.

Exemptions:

1 Ships operating solely within waters which are under the jurisdiction of a single State;

2 Ships entitled to sovereign immunity (as per MARPOL 73/78, article 3(3));

3 Ships exempted by the destination port State (to the extent exempted);

4 Ships exempted by a regional agreement (to the extent exempted).

APPLICATION CONCEPT 2

Unless expressly provided otherwise, the Regulations of this [Annex/Convention] apply to all ships* that carry ballast water and which may operate in or voyage to waters under the jurisdiction of a port State which has declared that it requires these regulations to apply.

Exemptions:

1 Ships operating solely within waters which are under the jurisdiction of a single State;

2 Ships entitled to sovereign immunity (as per MARPOL 73/78, article 3(3));

3 Ships exempted by the destination port State (to the extent exempted);

4 Ships exempted by a regional agreement (to the extent exempted).

***

_____

* As per MARPOL 73/78 definition

ANNEX 5

SAFETY REGULATION
Text proposed by Greece:

SAFETY REGULATION

1 When a ship is engaged in a ballast management procedure required by regulation 4, all the necessary considerations and precautions shall be observed in order the safety of the ship, its crew, or its passengers to be ensured.

2 Ships which conduct ballast water exchange shall strictly observe the following safety considerations:

- Maintenance of adequate intact stability
- Hull girder bending moments and shear forces within permissible limits
- Torsional stresses
- Wave induced hull vibration
- Sloshing caused by resonance with ship motion
- Minimum/maximum forward and aft draughts
- Minimum/maximum trim by stern
- Structural strength or stability problems due to added weight
- Avoidance of over-stressing of cargo securing Arrangements
- Avoidance of over and under-pressurization of ballast tanks
- Excessive pumping capacity
- Ballast tanks air pipes proper design
- Assessment of the adequacy of the sounding arrangements
- Admissible weather conditions
- Personnel safety
- Reduced human operator performance
- (others to be developed)

3 Any requirement on a ship relating to ballast management options mentioned in reg 4(1)(a) shall be waived where the ship's ballast water management plan indicates it is unsafe or the master otherwise reasonably determines that undertaking such an operation would jeopardize the safety of the ship, its crew or its passengers. The master shall record the reason for not undertaking ballast water exchange in the ship's log.

4 When none of the ballast management options mentioned in reg 4(1)(a) can be undertaken due to safety reasons, the ship shall inform port State authorities, prior to entering a sea area under its jurisdiction provided that the port State has notified the Organization of its desire to receive such information.

_____